Title
742 Variable Recognition of Sessile Serrated Adenomas Among Colonoscopists and Pathologists - a Compounded Roadblock to Reducing Interval Colon Cancers

Journal
Gastrointestinal Endoscopy, 79(5)

ISSN
0016-5107

Authors
Flores, Sarah L
Ziogas, Argyrios
Albers, Gregory
et al.

Publication Date
2014-05-01

DOI
10.1016/j.gie.2014.02.179

742

Variable Recognition of Sessile Serrated Adenomas Among Colonoscopists and Pathologists - a Compounded Roadblock to Reducing Interval Colon Cancers

Sarah L. Flores*[1], Argyrios Ziogas[2], Gregory Albers[1], Hoda Anton-Culver[2], William E. Karnes[1]

[1]*Medicine, Division of Gastroenterology, UC Irvine, Orange, CA;* [2]*Epidemiology, UC Irvine, Orange, CA*

Background: "Interval cancers" (ICs) occur within 3 years after colonoscopy and represent 7.2-9% of new colorectal cancer (CRC) diagnoses. Most ICs originate in the right colon from missed, incompletely removed, and/or de novo rapidly devel-oping neoplasms. Sessile serrated adenomas (SSA) are candidate precursor lesions based on their subtle flat morphology, right-sided distribution, high incomplete removal rates, and alternative pathway to CRC. Appropriate surveillance depends on recognition of SSAs which can be difficult to find endoscopically and difficult to distinguish pathologically from non-premalignant hyperplastic polyps (HP). Aims: Determine the variability of SSA recognition by colonoscopists and pathologists during routine practice at an academic center. Methods: Colonoscopy and pathology data were collected prospectively as part of our colonoscopy quality program. The dataset analyzed included 1566 colonoscopies performed by 7 colonoscopists between June 2012 and Oct 2013. 2235 polyps were classified by 8 different pathologists. Those classified as adenomas (tubular, tubulovillous, or villous), HPs or SSAs were included in analysis. Polyp detection rate (PDR), adenoma detection rate (ADR), HP detection rate (HDR), and SSA detection rate (SDR) were determined by the number of patients with at least one of the given polyp type per 100. Pathology classification rates were examined on a per polyp basis using the clinically provided diagnosis. Chi-square and Fisher exact methods were used to test differences in detection and classification among endoscopists and pathologists. Results: Among colonoscopists, PDR, ADR, HDR and SDR (range) were 62% (28-68%), 43% (25-54%), 22% (9-30%) and 7% (0-14.5%), respectively and varied significantly between colonoscopists ($p = .038$). Adenoma classification rates were not significantly different between pathologists (64% [59-69%]). However, classification rates of HP (28% [19-38%]) and SSA (8% [3-21%]) varied significantly between pathologists ($p < .0001$) and were inversely related ($R2 = 0.69$). SSA/HP ratios ranged between 0.09 and 1.13 among pathologists. Conclusions: Recognition of SSAs is dependent on colonoscopists and pathologists and is worrisomely variable among both groups. If SSAs represent the precursor lesions of ICs, prevention of ICs will require more accurate methodologies for detection of SSAs by colonoscopists and distinction of SSAs from HPs by pathologists.